



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
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Elk gather at the Rocky Flats National Wildlife Refuge in Colorado. A portion of a former DOE weapons facility was transformed into a wildlife refuge.

DOE Embarks on Execution Phase of Asset Revitalization Initiative

The U.S. Department of Energy recently announced that Cynthia Anderson, who currently serves as the Office of Environmental Management Chief Operations Officer, will lead the Asset Revitalization Initiative (ARI) as Program Executive Officer. The initiative is a DOE-wide effort to examine ways to work with local communities to support the reuse of DOE resources.

Anderson will oversee the Execution Phase of ARI as DOE works to implement beneficial reuse options across the DOE Complex, including reindustrialization, clean energy development, and the creation of educational centers and nature preserves.

Anderson oversaw EM's \$6 billion American Recovery and Reinvestment Act Program



Savannah River Site Opens Door for Future Missions with Enterprise SRS

U.S. Department of Energy officials celebrated the cleanup and closure of P and R Reactor Areas under the American Recovery and Reinvestment Act at the Savannah River Site (SRS) on Sept. 29 and announced the vision for future missions at the site with Enterprise SRS.

The event celebrated the close of one era and the beginning of an exciting new era of future missions for SRS.

"The accomplishments achieved through the Recovery Act, such as the closure of P and R Reactor Areas, are tremendous, but I commit to you that SRS is not a closure site," EM Acting Assistant Secretary David Huizenga said. "Through the implementation of Enterprise SRS, the site will utilize its nuclear materials workforce, knowledge, and assets to help the nation address its critical missions in the three key areas of environmental stewardship, clean energy, and national security."

Huizenga joined federal and state regulators,

which has reduced DOE's footprint by more than 515 square miles through August 2011. Recovery Act work has converted contaminated facilities and land into revitalized assets for reuse.

DOE Defines Path Forward with Six Steps in Execution Phase

The DOE recently identified six specific steps in the Execution Phase to advance strategies and recommendations formed by the ARI Task Force to spur economic growth around DOE sites and create new jobs for workers in the communities around the sites. The steps include co-locating multiple federal agencies and commercial partners at DOE sites, attracting resources from the private sector, promoting clean energy goals, and continuing to actively engage stakeholders in the initiative.

Mark Gilbertson, EM Deputy Assistant Secretary for Program and Site Support, served the task force during Phase I as Senior Advisor to DOE Office of Legacy Management Director Dave Geiser, who chaired the group.

"It has been an exciting six months," Gilbertson said about his detail with the task force. "This phase is going to be really critical because we are moving from information gathering into the execution stages of it. The framework is put into place, now it is time for the implementation. We are going to work closely to try and leverage the assets that exist at the sites and look for opportunities to partner with the private sector."

Task Force Points to Drivers Impacting Assets

In its August 2011 report to Congress, the task force notes that the DOE will manage multiple drivers that will affect the use of its assets. One of the drivers is a reduction in DOE's footprint as EM completes significant portions of the Cold War cleanup. Another involves the changes to DOE's nuclear security as the National Nuclear Security Administration (NNSA) modernizes the nuclear security enterprise. NNSA will significantly reduce its footprint for weapons work and envisions a

the Savannah River Nuclear Solutions Recovery Act Team, and local community stakeholders for the event.

The event marked the rollout for the SRS Strategic Plan, outlining the commitment of site leadership to develop future missions for the site. Included in this is Enterprise SRS, a new initiative to transform past environmental liabilities into revitalized assets for future use, including national security, clean energy development, and environmental management.



The Mound Site's Operable Unit-1, a former mixed-waste landfill, is shown following cleanup.

Mound Advanced Technology Center is Hub of Innovation

The Mound Advanced Technology Center is humming with energy research and development activity and site improvements designed to grow business at the former nuclear weapons research and production facility where former employees, regulators, community members, elected officials and Department of Energy leaders celebrated completion of cleanup one year ago.

"There's a big story to tell. We are taking ownership of the site and leveraging assets such as human capital, equipment and real estate. Our mission is to help create wealth for the community by leveraging those assets," said Mike Grauwelman, president of the Mound Development Corporation (MDC) that promotes the business, science and technology park

smaller, safer, more secure and more efficient enterprise, the report says.

"There is a synergy established with NNSA sites modernizing their infrastructure," Gilbertson said.

The DOE has demonstrated its commitment to partnering with local communities to establish beneficial uses for the Department's assets, which include land, world-class laboratories, a highly skilled workforce, and access to natural resources such as surface water and groundwater, Gilbertson said.

He is impressed that the initiative resonates with local communities. "People are upbeat about it. They want to understand it, work together, and try and achieve it," he said.

Transparency is Important with Asset Revitalization

Gilbertson stressed the importance of transparency as the DOE moves forward with beneficial reuse options.

"We have to open dialogues with the community about the direction we take. We all have to work together to understand what our goals are from a community, local, regional, and national perspective," he said. "We will work with the communities to establish the end use. If they want to pursue other kinds of activities, we will try to work with them to achieve their visions. It is about partnerships going into the future, and looking for joint opportunities."

As the Department works with local communities to revitalize former assets, it will look to reuse options that create new employment opportunities and enhance the quality of life for local communities, Gilbertson said.

"I think solutions that provide more jobs or replace those jobs that are lost are more attractive options," he said.

For example, DOE could work with the private sector to establish advanced manufacturing businesses at the sites, he said.

Real estate assets at the Miamisburg, Ohio-based Mound facility include land, unique buildings, and the infrastructure that supported the 306-acre site, according to Grauwelman. Formerly known as The Miamisburg Mound Community Improvement Corporation, MDC has been renamed to emphasize its focus on marketing and economic development.

Today, 14 businesses with 310 employees operate at Mound. Most are involved in research, development, testing and production of high-tech products and processes. Some companies are partnering with nearby Wright-Patterson Air Force Base (and its resident Air Force Institute of Technology), and the University of Dayton Research Institute.

The proximity of the Mound site to cities such as Cincinnati and Columbus, Ohio, and Indianapolis, Ind., and its setting in the nation's heartland make it an attractive location for new and expanding businesses, advocates say. The region offers affordable housing, high-quality school systems, reasonable commutes, and many major universities. It also has a transportation network that is simple to navigate, they say.

The Mound Advanced Technology Center has received multiple grants from the state of Ohio, along with funding from the American Recovery and Reinvestment Act, generating site improvements and new business activity. Last year, the state of Ohio awarded a \$3.5 million grant for the construction of a road through the Mound site. This work, which includes utility extensions, building improvements and building demolitions to make way for parking lots, is set for completion in the next few months, Grauwelman said.

Mound also received \$261,000 from the State Energy Program under the Recovery Act for projects that will reduce electrical usage by 10 percent and natural gas usage by 16 percent. The funds will pay for lighting upgrades, electronic building controls and energy monitoring, tenant metering and building energy auditing. The efficiency upgrades will slash energy costs for MATC clients.

The task force's report contains many examples of asset revitalization that have occurred over the years. For example, DOE began transferring the former Pinellas weapons plant in Florida to the Pinellas County Industrial Development Authority in 1993. Today, the Science, Technology, and Research Center houses 35 businesses. About 1,600 people are employed at the site.

The report also points to examples of DOE research and demonstration. To help the private sector deploy energy research, DOE is considering how to build demonstration projects at levels that investors will accept as commercially viable. For example, projects at Oak Ridge National Laboratory in Tennessee include development and application of processing for new composite materials for lithium-ion batteries.

External Groups Weigh in on Asset Revitalization

In Phase I, the task force obtained input on the initiative from entities such as national laboratories at DOE sites, Community Reuse Organizations (CRO), and the Energy Communities Alliance (ECA).

In comments to the task force, ECA said it is pleased to work with the task force to identify local community priorities related to facilitating the reuse of DOE assets and assisting active DOE and NNSA facilities to be leaders in implementing and utilizing clean energy.

"Energy Communities (ECA local government officials and CRO members) stand ready to build on existing partnerships with DOE to ensure successful deployment of ARI," ECA said in its comments.

In their comments, CROs said the organizations "play a very important role in DOE's efforts to transition existing Federal properties and other assets to future beneficial uses through the establishment of the Asset Revitalization Initiative."

Sandia National Laboratory wrote in its comments that the Lab is encouraged by the

In other recent developments, the Dayton Power and Light Company announced plans to install its second solar array demonstration plant at the Mound Advanced Technology Center to assess the feasibility of solar power as a renewable energy source.

But the biggest bright spot is a \$2 million grant to a Mound company from the Advanced Research Projects Agency-Energy program for a key energy project — research on transformational battery technology. This same company, Inorganic Specialists, received a \$1 million grant from the state of Ohio for research on developing a lithium-ion battery and fuel cell gas diffusers.

The \$1 million award from Ohio's Third Frontier program will move to the Mound park pilot production capabilities for an alternative energy technology developed by the company. It will cover production of silicon-coated carbon nanofiber paper that can be used in applications such as lithium ion batteries, fuel cell gas diffusers, electromagnetic shielding, composites and resistive heating products. Mound Technical Solutions, which is also based at the center, and three companies outside the area, are collaborating on this project.

The Mound Development Corporation has invested \$50,000 in building improvements to house the pilot production facility for this particular project, Grauwelman said. Material produced in the facility is expected to increase the storage capacity of batteries used in automobiles by five times, representing "a quantum leap in technology," Grauwelman said.

For example, a car using the lithium ion battery technology developed at the facility could potentially expand its travel range from 120 miles to 600 miles, Grauwelman said. "That's a game-changer."

The vision of MDC and community leaders is a thriving science, technology and business center known for innovation and commercialization of energy and manufacturing advances, materials processing

"message that our real estate assets could have expanded usage, specifically to allow for 3rd party (alternative financing) projects that would benefit the Lab and create better connections with private industry and the academic community."



EM Acting Assistant Secretary David Huizenga, left, and EM Principal Deputy Assistant Secretary Tracy Mustin, second from left, toured the B Reactor National Historic Landmark at the Hanford site in August 2011 with Richland Operations Office Manager Matt McCormick, third from left, and Richland Operations Office Asset Revitalization Program Manager Colleen French. Huizenga and Mustin were among nearly 8,000 visitors to the B Reactor this year. The completion of cleanup of Hanford's Columbia River Corridor is allowing greater public access to the B Reactor, which has been recommended by the National Park Service for inclusion in a potential future National Historic Park honoring the Manhattan Project. Local community leaders view this as an economic opportunity for the local area.

Council Says Hanford Land Holds Economic Development Promise

applications and information-systems markets.

DOE Unveils Long-Term Stewardship Web Site

The U.S. Department of Energy's Office of Environmental Management has launched a website to provide the public and key stakeholders information and resources about long-term stewardship responsibilities at cleanup sites across the DOE complex.

The site has information on the physical controls, institutions and other mechanisms that are needed to ensure the protection of people and the environment at sites where DOE has completed or plans to complete cleanup work, and where legacy contamination will remain hazardous. The Long-Term Stewardship (LTS) Resource Center can be found [here](#).

As a federal land manager and steward of natural and cultural resources at DOE sites, government managers use a combination of institutional controls for the LTS program to manage lands, facilities, materials and resources under its jurisdiction. These legacy management procedures include land-use controls, monitoring and maintenance, and information management practices.

Many of these controls are required under various laws including the Nuclear Waste Policy Act; the Atomic Energy Act; the Resource Conservation and Recovery Act; and the Comprehensive Environmental Response, Compensation and Liability Act. In other cases, there are no specific statutory requirements, but DOE has decided to use institutional controls to supplement active remediation, pollution control, public and resource protection, physical security, or to bolster the integrity of engineered remedies.



U.S. Department of Energy officials are considering the transfer of 1,341 acres of land at the Hanford site in Richland, Wash., to the Tri-City Development Council (TRIDEC) for economic development purposes. Members of the council hope the land will attract new business to the area and create jobs.

TRIDEC requested the parcel of land near the southern border of the Hanford site, and just north of Richland, in May. The land, which was used mainly as buffer area for the nuclear reservation during plutonium production years, is not contaminated.

The cities of Kennewick, Pasco and Richland have relied heavily on the employment of Hanford workers whose incomes have been the lifeblood of the local economy for many years. While much work remains at the Hanford site over the next few decades, TRIDEC hopes areas that are available for industrial use can help transition the Tri-City area over time from a federally funded environmental cleanup center to an economic base funded by private businesses.

The DOE Comprehensive Land Use Plan calls for most land on the 586-square-mile site to be used for preservation or conservation, with 10 percent of the land planned for industrial use. TRIDEC figures the land could draw two larger businesses that hire as many as 3,000 people, or three smaller businesses that hire a total of 500 employees.

The next steps in the land transfer process are for DOE's Richland Operations Office to conduct an environmental study, perform an



Features of the Department of Energy's Portsmouth site in Piketon, Ohio, were discussed at a recent public meeting hosted by DOE and its contractor, Fluor-B&W, in Waverly, Ohio. Fluor B&W officials Danny Nichols (left) and Bruce Hanni (right) participated in the session.

DOE Portsmouth Leaders Host Public Meeting on Cleanup Plans

More than 130 community members attended a public meeting on Sept. 20 hosted by representatives of the Department of Energy's Portsmouth site and its contractor, Fluor-B&W Portsmouth, to discuss current and future activities at the site in Piketon, Ohio. The event was held at Waverly High School in Waverly, Ohio, north of Piketon.

DOE Site Director Vincent Adams and Fluor-B&W Program Manager Jamie Jameson welcomed attendees, who heard presentations from Fluor-B&W senior leaders Bob Nichols, Danny Nichols, Marc Jewett and Jerry Schneider. These officials provided an overview of the path forward in decontamination and decommissioning (D&D) and the need for public input to determine key decisions in the cleanup process.

During the session, Adams stressed the importance of hearing from the community as part of the DOE decision-making process. He emphasized that the plant's cleanup activities will be transparent, saying information will be publicly updated to keep all stakeholders informed and engaged.

Following the assembly, participants were invited to visit eight stations operated by subject-matter experts. The experts provided details about D&D processes and the

analysis under the National Historic Preservation Act, and work closely with the public, stakeholders, and Hanford regulators.

DOE officials are currently developing an estimated timeline for the land transfer process, and a cost for moving forward with the various analyses.

In a recent letter to TRIDEC regarding next steps in the process, Matt McCormick, Manager of the DOE Richland Operations Office, said, "Thank you for all you are doing to create jobs in our community."

Oak Ridge's Reindustrialization Program Stronger than Ever

As the U.S. Department of Energy (DOE) initiates the next phase of the Asset Revitalization Initiative, the Oak Ridge site in Tennessee will continue its robust program that began 15 years ago.

Oak Ridge's Reindustrialization Program dates back to 1996. At the time, five massive uranium enrichment facilities and hundreds of support facilities at the former K-25 gaseous diffusion plant sat dormant with minimal benefit to the agency or community. DOE began its program in collaboration with the newly formed Community Reuse Organization of East Tennessee (CROET) that was created as a nonprofit entity to work with DOE to foster economic development in the Oak Ridge area. In 1997, DOE renamed the site the East Tennessee Technology Park (ETTP) and designated its 1,300 acres as an area slated for redevelopment and reuse. The early years of reindustrialization focused on leasing properties at the site to CROET, which in turn sub-leased properties to the private sector. At the height of the leasing program, more than 80 leases were in place with 35 private companies. A desire by DOE's Office of Environmental Management to accelerate cleanup at the site, coupled with new legislation, led to a change from leasing to transferring property for reuse.

PORTSFuture project by Ohio University to learn stakeholder preferences for future site use. They also heard about waste disposition and ways to stay informed. Representatives of the Site Specific Advisory Board (SSAB) were available at one of the stations and experts offered historical perspective on the heritage of the gaseous diffusion plant at another station.

DOE and Fluor-B&W Portsmouth officials hope to make the public meetings a quarterly event for members of communities from Pike, Ross, Jackson and Scioto counties.

Community Reuse Organization Provides \$150,000 to Support Economic Development

A Community Reuse Organization has used a portion of proceeds from the sale of recycled materials from the Department of Energy Portsmouth site to support economic development in Scioto County in Ohio. The Southern Ohio Diversification Initiative (SODI) recently approved \$150,000 in financial assistance to the Southern Ohio Port Authority in Scioto County for industrial park improvements.

The funds will be used toward relocation of electrical power lines at the Bob Walton Industrial Park in New Boston, Ohio. The power line work is needed for site preparation so plant construction can commence for Reliance Steel, a steel processing and sales company.

Reliance Steel is expected to start construction at the New Boston site before the end of the year and be in operation by mid-2012. The company plans to begin with 66 employees and hopes to employ approximately 100 workers at full production. The local plant will be a subsidiary of Reliance, Infra-Metals of Wallingford, Conn.

"Funding for this award came from the sale of recyclable metals reclaimed from the demolition of structures at the former gaseous diffusion plant." DOE Site Director Vincent

Fast forward to 2011 and reindustrialization is flourishing at ETTP, spurring economic growth and saving taxpayers millions of dollars. CROET's reinvestments have transformed the front part of the site, which is now in the hands of the private sector and served by public utilities and roadways. The EM program has made significant progress, removing legacy environmental risks and 246 facilities. The site's location and major attractions, such as multi-use buildings, comprehensive infrastructure and a trained workforce, have attracted a wide array of businesses. To date, Oak Ridge's Reindustrialization Program has transferred ownership of 680 acres and 332,000 square feet of building space. The program has also leased more than 300 acres of land and approximately 145,000 square feet of building space.

Currently, about 15 companies are engaged in activities ranging from mixed-waste processing to analytical chemistry to manufacturing fuel cells. These businesses boost the community's tax base and utilize existing facilities. The program also provides substantial savings for DOE. To date, the program has saved \$45 million through avoided operations, maintenance, surveillance, and demolition costs.

DOE's transfer of fire protection and emergency response services to the city, along with transferring utility systems, has resulted in approximately \$5 million in cost savings annually. All of these cost savings fund additional environmental cleanup activities at the site.

Several new developments make the program's future look even brighter. CROET recently constructed two speculative buildings; one of these buildings already houses a business and the other is close to finalizing a tenant. In 2011, the Reindustrialization Program leased 282 acres at ETTP for potential renewable energy projects and transferred 13 acres in the heart of the former main plant area for industrial development.

This month, a new four-year agreement with the city of Oak Ridge was signed to maintain fire and emergency services, continuing

Adams said. "We are extremely pleased that this could result in the creation of approximately 100 jobs. It is a clear first demonstration of DOE's strong commitment to partnering with the local community and organizations such as SODI to not only transform these types of liabilities into valuable assets — saving taxpayers dollars — but also to use the value of these assets for job creation and economic growth in the area."

The financial assistance for the Southern Ohio Port Authority was the first allocation of funding to support economic development efforts in Pike, Scioto, Ross, and Jackson counties resulting from proceeds SODI received from the recycling of excess clean scrap metals at the Portsmouth site.

"We are excited to help facilitate this new construction to bring much-needed jobs to southern Ohio," said Steven Shepherd, SODI's Executive Director.

SODI is a DOE-recognized Community Reuse Organization. Under an agreement between DOE and SODI, non-radioactive scrap metals from the cleanup of the former uranium enrichment plant in Piketon are being transitioned to SODI for recycling with a portion of the recycling proceeds returned to the local communities to support economic growth in the four-county region.

annual savings of approximately \$2 million per year. Finally, five more parcels, covering approximately 300 acres, are in various stages of transfer.

Another significant achievement is expected in October with the completion of the Environmental Assessment for the "Transfer of Land and Facilities within the East Tennessee Technology Park and Surrounding Area." This assessment will permit broader commercial uses and enable the transfer of additional acreage.

As a pioneer in reuse and revitalization, Oak Ridge's Reindustrialization Program continues searching for new and innovative ways to accelerate cleanup at the site, foster economic development, and provide savings to taxpayers.

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